EIR102 Series Quick Start Guide
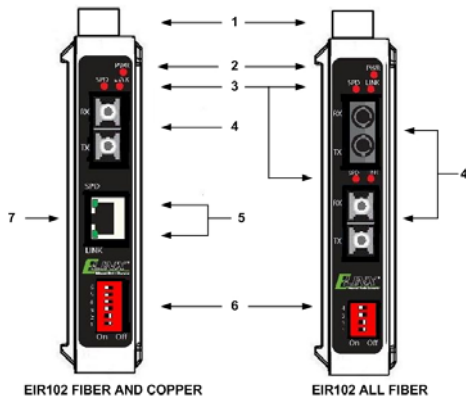
QUICK START GUIDE

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Package Contents

- EIR102 Series Industrial Media Converter
- Quick Start Guide (One per shipment)
- Power Terminal Block (installed)
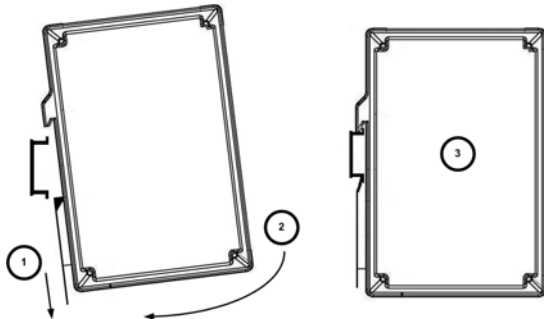- Fiber Optic Dust Covers (installed on fiber optic models)

If any item is missing or damaged, contact B&B Electronics for a replacement

Front Panel

EIR102 FIBER AND COPPER   EIR102 ALL FIBER

1	Power Terminal Block	2 Position, Removable
2	PWR LED	ON When Power Applied
3	Fiber Optic SPD LED	Normally OFF
3	Fiber Optic LINK LED	On When Fiber Port Linked
4	Fiber Optic Ports	No. & Type Depends on Model
5	RJ45 SPD LED	ON if 100 mbps
5	RJ45 LINK LED	ON When RJ45 Port Linked
		FLASHES When Data Transmitted
6	DIP Switch	4 POS for Fiber to Fiber
		6 POS for Copper to Fiber
7	RJ45 Port	Depends on Model

DIN Rail Mounting

1. Slide and hold the DIN Clip toward the bottom of the Media Converter. Angle the top portion of the DIN mount over the top of the DIN rail.
2. Move the Media Converter so that it is parallel with the DIN Rail.
3. Release the DIN clip. The spring should return it to its original position.

Configure DIP Switch

1. Fiber to Copper models have a 6 position switch.
2. Fiber to Fiber models have a 4 position switch.
3. Switches are numbered from the bottom.
4. Cycle power after changing DIP Switch configuration.

Fiber and Copper Model   All Fiber Model

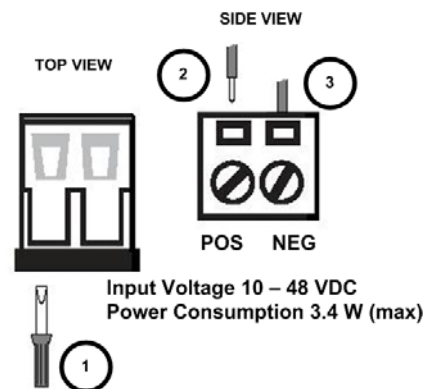| Switch	ON	OFF
1	Snooping (Store & Forward)	Snooping (Direct Pass-through)
2	Disable Link Fault Pass-through	Enable Link Fault Pass-through
3	Top Port Forced Half-duplex	Top Port Forced Full-duplex
4	Bottom Port Forced Half-duplex	Bottom Port Forced Full-duplex
5*	RJ45 Forced 10 mbps	RJ45 Forced 100 mbps
6*	RJ45 Forced Mode	**RJ45 Auto Negotiate Enabled

* Switch 5 and 6 are only on models with an RJ45 Port
** When RJ45 Auto Negotiate is Enabled, Switch 4 and 5 are ignored

Attach Power Leads
External Supply Required

Warning: Work Safe – Equipment damage or electrical shock hazard exists. DO NOT ATTACH OR REMOVE LEADS WITH THE POWER SUPPLY ENERGIZED!

SIDE VIEW

TOP VIEW

POS   NEG

Input Voltage 10 – 48 VDC
Power Consumption 3.4 W (max)

1. Loosen the screw to open the terminal block lead clamp.
2. Insert the power lead. TB will accept 12-28 AWG wire.
3. Tighten the screw to close the terminal block lead clamp. Ensure the clamp holds the lead securely. However, do not over tighten.

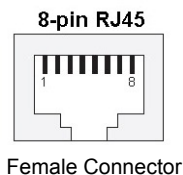**NOTE: For replacement Terminal Block order Part # 7444.**

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QUICK START GUIDE

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Attach RJ45 Cable (If equipped)

8-pin RJ45

Female Connector

1. Auto MDI/MDI-x is supported. A straight through or cross-over cable may be used.
2. 10/100BaseT auto negotiation and full/half-duplex are supported. Speed and duplex can also be forced. Refer to DIP Switch settings.

MDI Cable Pinout

Pin	Signal
1	Tx+
2	Tx-
3	Rx+
6	Rx-

MDI-X Cable Pinout

Pin	Signal
1	Rx+
2	Rx-
3	Tx+
6	Tx-

Fiber Optic Cable Information

Fiber Optic Cable Information

Mode and Distance	Type	Wavelength
Multi-mode (2 km)	62.5/125 µm	1310 nm
Single-mode (15 km)	9/125 µm	1310 nm
Single-mode (40 km)	9/125 µm	1310 nm
Single-mode (80 km)	9/125 µm	1550 nm

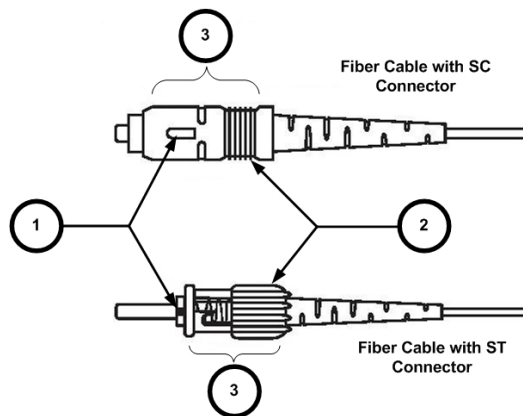|	Output Power	RCVR Sensitivity
Multi-mode (2 km)	-19 to -14 dBm	≤ -32 dBm
Single-mode (15 km)	-15 to -8 dBm	≤ -32 dBm
Single-mode (40 km)	-5 to 0 dBm	≤ -34 dBm
Single-mode (80 km)	-5 to 0 dBm	≤ -34 dBm

Installation Complete

1. When the network cables are attached and power is applied, installation is complete.

NOTE: Recycle power if DIP Switch changes are made after power up.

Attach Fiber Optic Cable

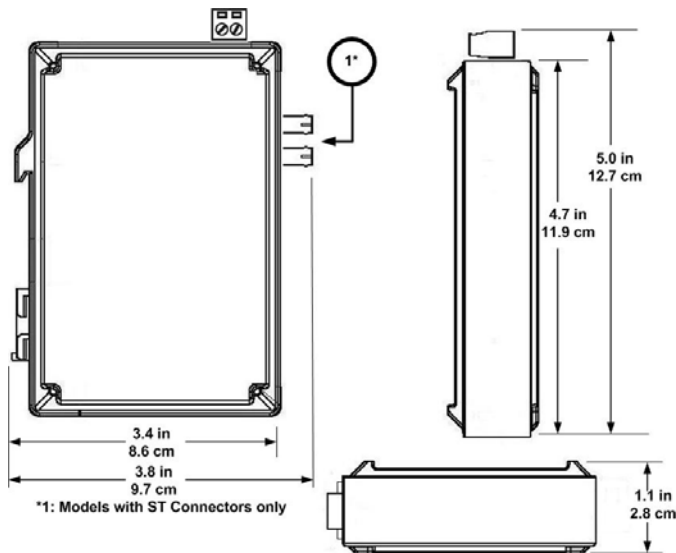**Warning: Work Safe – This is a Class I Laser/LED device. To avoid causing serious damage to your eyes, DO NOT STARE DIRECTLY INTO THE LIGHT.**

1. Ensure your fiber optic cable is terminated with the correct connector type. EIR102 Media Converters use SC or ST connectors.
2. Fiber optic type for each port is located on the product's side label. When connecting the cable to the media converter, be sure to line up the slider guide on the cable and media converter connectors.
3. Connect the fiber optic transmitter to the downstream device's receiver and vice-versa.

Mechanical Diagram

*1: Models with ST Connectors only

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